

ABSTRACT OF THE INVENTION

A method for segmenting a small feature in a multidimensional digital array of intensity values in a data processor computes an edge metric along each ray of a plurality of multidimensional rays originating at a local intensity extreme (local maximum or minimum). A multidimensional point corresponding to a maximum edge metric on each said ray is identified as a ray edge point. Every point on each ray from the local extreme to the ray edge point is labeled as part of the small object. Further points on the feature are grown by labeling an unlabeled point if the unlabeled point is adjacent to a labeled point, and the unlabeled point has a more extreme intensity than the labeled point, and the unlabeled point is closer than the labeled point to the local extreme. The resulting segmentation is quick, and identifies boundaries of small features analogous to boundaries identified by human analysts, and does not require statistical parameterizations or thresholds manually determined by a user.